

# Inside Wallops

National Aeronautics and Space Administration  
Goddard Space Flight Center  
Wallops Flight Facility, Wallops Island, Va.

Volume XX-05

Number 20

June 20, 2005



## Local Students Prepare Balloon Experiments for Launch

"Student Balloon Science and Engineering Flight Payloads", an educational Director's Discretionary Fund, (DDF) has made it possible for local students to design, build and fly their experiments on a NASA long duration balloon.

Six Salisbury University and 180 middle school students from Colonel Richardson Middle School, Federalsburg, Md.; Wicomico Middle School, Salisbury, Md.; Salisbury Middle School are taking part in the project.

Joel Simpson and Jessica Thompson, NASA GN&C and Mission Systems Engineering Branch; Gabe Garde and Tracy Bohaboj, New Mexico State University, Physical Science Laboratory, have visited the middle schools to discuss and demonstrate the basics of ballooning.

Students considered the flight operations phases and constraints typical with balloon flights, including launch, ascent,

float, descent, recovery, and post flight data recovery and discussed how to apply the phases to a design for an automobile.

Salisbury University physics students recently participated in a project design review at Wallops. Following the design review, they participated in environmental testing of their flight packages.



Photo courtesy of Jessica Thompson

*Salisbury University physics student, Heather Conley, loads an experiment into the environmental test chamber at Wallops.*

The student payload consists of a variety of scientific measurements including barometric pressure, pressure related acoustic variances, temperature, solar radiation, acceleration, gravitational and magnetic field changes.

The environmental testing included temperature and pressure changes which simulated the actual conditions of the balloon flight.

This testing provided a good data set for the atmospheric sensing devices used by each team and served to determine component survival and highlight where sensor data deteriorates and recovers.

Although the college semester has ended, several dedicated students have continued to assist with the integration preparations for the university and middle school packages. The launch is currently scheduled for fall 2005 from Ft. Sumner, N.M.

## Wallops Shorts.....Balloons Take the Spotlight In the News

Garden City (Kansas) Telegram -- The HERO has Landed"

### BLAST In the News

The Balloon-borne Large Aperture Sub-millimetre Telescope, (BLAST), launched from Esrang, Kiruna, Sweden, on June 12, landed early June 16 on Victoria Island in Canada. The 40 million cubic foot balloon was the largest ever launched from the Swedish Space Corporation's Esrang. Scientific participation included the University of Pennsylvania, University of Toronto, Brown University, NASA's Jet Propulsion Laboratory, University of Miami, University of British Columbia, Cardiff University, and INAOE in Mexico. The launch generated the following media coverage during the week of June 13:

Toronto Star -- Balloon Scope Studies Origin of Stars

Guardian Limited (England and Wales) Telescope Hanging from Balloon Will Unlock Secrets of Space

SpaceRef.com -- Telescope to Travel from Europe to Northern Canada Over the Next 6-9 Days

Nordic Space News -- Balloon-Borne Large Aperature Sub-Millimetre Telescope (BLAST) Been Launched from ESRANGE

Eu.SpaceRef -- The Giant Balloon Borne Telescope BLAST Launched from SSC Esrang

ScienceBlog.com -- Balloon-Borne Telescope to Spy Distant Galaxies

CBC News -- Balloon-Borne Telescope Touches Down Successfully in Arctic

The Globe & Mail -- Space Telescope has Safe Landing

Canadian Press -- Reaching for the Stars

Vancouver Province -- Scientist Have a Blast with Telescope

National Post -- Balloon Telescope Lands Safely"

The Ottawa Citizen -- Safe Landing for Telescope on 'Big Bang' Space Mission

The Edmonton Journal -- Balloon-Led Estraterrestrial Telescope Touches Down

The Vancouver Sun -- Gondola Returns Telescope with Payload Transmitting

The Toronto Star -- U of T Telescope Falls Softly in Nunavut

***The Women of Wallops presents WOW Day!***  
***“WOMEN LEADERS: The Sky is NOT the Limit!”***

Wednesday, June 29  
9 -11 a.m.

Building E-2, Conference Room

“LeaderPlay” Leadership begins with humor — guest speaker Marianne E. Frederick

11:30 a.m. - 12:45 p.m.-- Building E-2, Williamsburg Room

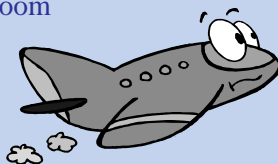
Lasagna Luncheon with Wallops Female Aviators

Jeanette Smolinski, Cate Fairchild, and Betty Flowers

Catered by WW Catering, tickets \$6.00.

Purchase by COB June 27 in the Exchange Store or

from Markita Bivens, Building F-6.



1:30 – 3:30 p.m. -- Building E-2 Conference Room

“TeamPlay” A ‘No Ropes’ Approach to Building Teams — guest speaker Marianne

E. Frederick

For further information, contact Kim Crockett at x1803.

***Congratulations***  
***to NSROC’s Latest Retirees***

Andy Killmon, Journeyman CNC Technician, retired effective June 16. Killmon has supported sounding rocket operations in Building F-10 for 15 years, beginning on May 7, 1990.

Lou Massar, Mechanical Technician, will retire effective June 30. Massar also has supported sounding rocket operations since December 11, 1989.

**The Blood Bank**  
**of the Eastern Shore**  
**Wallops Blood**  
**Drive**



**Wednesday, July 13**  
**Building D10, Gymnasium**  
**9 a.m. to 3 p.m.**

**Call the Health Unit**  
**@ x1266, by July 9<sup>th</sup>,**  
**to schedule an appointment**

***Reutilization of Excess Equipment & Material***

Need a new piece of equipment and don’t have the funds to purchase it? Try reutilization. The Wallops Disposal Office has found 47 items valued at \$210,000 for customers this fiscal year, compared to 66 items valued at \$251,000 last year.

You are encouraged to screen items in the warehouses at Greenbelt and Wallops. The Wallops, Building N-222, warehouse welcomes customers Monday-Friday from 8:30 a.m. to 3 p.m. Items available at Greenbelt can be found online at <http://availexcess.gsfc.nasa.gov/>.



To obtain equipment from either warehouse, complete a GSFC Form 20-38, Excess Property Transfer Request (available at <http://code235.gsfc.nasa.gov/forms/GSFCFORM20-38.dot>), obtain your Property Custodian’s signature and

hand-carry the request to Terry Ewell, Building F-16, for approval. Equipment located at Wallops can be picked up the same day. The Wallops Shipping Office will coordinate shipment of equipment located at Greenbelt.

A majority of excess equipment is available in very good condition at other NASA Centers and Federal agencies at no cost other than shipping charges. If equipment is located at a Defense Reutilization Marketing Organization’s Recycle Control Point, shipping is free. Often pictures of the equipment are available. Call extension 1133 with your requirements today!

Sterilizing unit; milling machine; Cushman scooter; boat, motor, and trailer what ever you need — the Wallops Disposal Office can help search for needed equipment.

***Deep Space Test Bed***  
***Launched from Ft. Sumner***

A NASA scientific balloon was successfully launched from Ft. Sumner, N.M., on June 18.

The Deep Space Test Bed bioastronautics experiment is an exposure platform containing test materials supplied by various research groups.

The flight is the engineering proof-of-concept flight to validate the DSTB gondola engineering design and NSBF systems interface for future Antarctic flights.

Dr. Mark Christl, NASA Marshall space Flight Center, is the principal investigator. Total flight time was 9 hours, 53 minutes.

***60 Years of Exploration***  
***June 24, 1955 - The first Nike-Deacon***  
***sounding rocket was launched from Wallops***  
***Island in cooperative USAF-NACA***  
***program of upper air density measurements.***

Get your tickets for NASA Night at Perdue Stadium as the Shorebirds take on West Virginia Power

Game starts @ 7:05 p.m.

The Voices of Wallops will sing the National Anthem to open the game.



Tickets are \$3 each for NASA badged employees and are available in the Exchange Store, Building E-2.

Purchase a ticket and you are automatically entered into a drawing with the winner tossing out the first pitch of the game!

Contact Karen Shannon @ x2020 for more information

*Inside Wallops* is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: [www.wff.nasa.gov](http://www.wff.nasa.gov)

Editor  
Asst. Editor

Betty Flowers  
Rebecca Hudson